Appl. No. 10/080,458 Atty. Docket No. G-275 (CP-1235) Amdl. dated 01/06/2004 Reply to Office Action of 10/06/2003 Customer No. 27752

#### REMARKS

#### Application Amendments

Claims 1-24 are pending in the present application. No additional claims fee is believed to be due.

Claim 1 has been amended to recite that "from about 0.1% to about 15% by weight of said aqueous composition" of a phosphate ester surfactant is incorporated into the described aqueous composition. Support for this amendment can be found at page 9, lines 28-29 of the specification. In addition, claim 1 has been amended to correct a typographical mistake regarding the term "composition". Support for this amendment can be found at page 10, line 13 of the specification. Claim 1 also has been amended to delete the term "hard" before the term "surface". Support for this amendment can be found in the preamble of original claim 1 as well as at page 4, lines 12-13.

Claim 9 has been amended to correct typographical mistakes regarding the phrases "stainless steel surface" and "an aqueous acidic composition". Support for these amendment can be found, respectively, at page 5, lines 26-34 of the specification and at page 10, lines 13-31 of the specification. Claim 9 also has been amended to recite that "from about 0.1% to about 15% by weight of said aqueous acidic composition" of phosphate ester surfactant is incorporated "in said aqueous acidic composition during its preparation". Support for this amendment can be found at page 9, line 28-29 as well as at page 10, line 13 of the specification. Further, claim 9 has been amended to replace the phrase "may be" with the phrase "are each independently selected from the group consisting of". Support for this amendment can be found at page 8, lines 9-20. Finally, claim 9 has been amended to replace the phrase "metal surface" with the phrase "stainless steel surface". Support for this claim can be found at page 5, lines 26-34 of the specification.

Claim 16 has been amended to correct a typographical mistake regarding the phrase "from about 20 to about 40 psig". Support for this amendment can be found at page 13, lines 7-8 of the specification.

Claim 17 has been amended to recite that the composition comprises "from about 3% to about 15% of a hydrogen peroxide oxidizing agent". Support for this amendment can be found at page 9, lines 27-28, as well as at page 10, lines 20-22 of the specification. Claim 17 also has been amended to correct typographical mistakes regarding the phrases "from about 0.1% to about 15% of a phosphate ester surfactant", "from about 0.1% to about 10% of an anionic amphiphilic polymer", and "(d) water;". Support for these amendments can be found at page 9, lines 26-30. Finally, claim 17 has been amended to recite "wherein said developer composition has an acidic pH". Support for this amendment can be found in original claim 17 as well as at page 10, lines 29-31.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

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# Rejection Under 35 USC 112, Second Paragraph

Claims 9-16 are rejected under 35 USC 112, second paragraph, as being indefinte in that, first, claim 9 requires incorporating a phosphate ester surfactant but fails to recite where this surfactant must be incorporated, and second, the clause "may be" renders the scope of the claims unascertainable. Claim 9 has been amended as described above, thus, it is believed that this rejection has been obviated.

Claims 17-24 are rejected under 35 USC 112, second paragraph, as being indefinite in that claim 17 requires a film formed by the composition being more easily removed from the surface, but fails to recite a comparative basis. Claim 17 has been amended as described above, thus, it is believed that this rejection has been obviated.

# Provisional Double Patenting Rejections

## Co-Pending US Application No. 10/080.459

Claims 1-7, 9, 15-17, and 23-24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of co-pending US Application No. 10/080,459. Additionally, claims 8, 10-14, and 18-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of co-pending US Application No. 10/080,459 in view of Applicant's statements in the Background of the Invention section of the specification of the present Application and US Patent No. 6,432,147 to Dias et al ("Dias").

Upon receiving notice of allowance of co-pending US Application No. 10/080,459, Applicant is prepared to file a properly executed terminal disclaimer in compliance with 37 CFR 1.321(c). Therefore, it is believed that these provisional rejections can be overcome.

### Rejections Under 35 USC 103(a)

### US Patent No. 6,432,147 to Dias et al

Claims 17-24 are rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,432,147 to Dias et al ("Dias"). The Examiner asserts that Dias discloses a hair coloring composition comprising hydrogen peroxide present in Applicant's claimed range, Applicant's claimed phosphate ester surfactants, Applicant' claimed cosolvents, and water, wherein the composition is within Applicant's claimed pH range. Dias does not specifically teach a range for the concentration of Applicant's claimed surfactant, however, the Examiner asserts that the exemplified compositions of Dias suggest a surfactant concentration of 1.5% to 1.7% which is within Applicant's claimed range. Applicant respectfully traverses the present rejection based on the following comments.

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Dias does not teach or suggest all of Applicant's claim limitations and, therefore, does not establish a prima facie case of obviousness (MPEP 2143.03). Applicant's developer composition claimed in claim 17, as currently amended, requires, inter alia, from about 3% to about 15% of a hydrogen peroxide oxidizing agent, and from about 0.1% to about 15% of a phosphate ester surfactant. Applicant's developer composition facilitates the removal of polymeric film formed on the surface of manufacturing equipment during or after the manufacture of the developer composition. This benefit is particularly important when stainless steel manufacturing equipment must be employed, as is typically the case for hair dye compositions which contain a hydrogen peroxide oxidizing agent present at a concentration in Applicant's claimed range.

First. Dias does not teach or suggest a developer composition containing from about 3% to about 15% of a hydrogen peroxide oxidizing agent. Rather, Dias discloses compositions containing from about 0.01% to less than about 3% by weight of the composition of an inorganic peroxygen oxidizing agent. See column 6, lines 45-53 of Dias. In Examples I-VII of Dias, the exemplified hair coloring compositions contain hydrogen peroxide at concentrations of from 0.7% to 2.5%. See column 32, lines 35-66 of Dias. Dias is directed generally to hair coloring compositions which can provide excellent hair coloring benefits while reducing hair damge by using substantially less of an inorganic peroxygen oxidizing agent as compared to a conventional oxidative hair coloring system. See column 6, lines 13-24 of Dias. As stated above, the benefit of Applicant's developer composition is particularly important in the manufacture of hair coloring compositions containing a hydrogen peroxide oxidizing agent present at a concentration in Applicant's claimed range because stainless steel manufacturing equipment typically must be used. However, it is these hair coloring compositions, which contain higher hydrogen peroxide concentrations, from which Dias specifically teaches away.

Second, Dias does not teach or suggest a developer composition containing from about 0.1% to about 15% of a phosphate ester surfactant. Dias broadly discloses a number of anionic surfactants suitable for inclusion in the compositions of Dias, among which are listed anionic surfactants such as alkyl phosphate esters and ethoxylated alkyl phosphate esters. However, Dias provides no suggestion to select, or no preference for, specifically phosphate ester surfactants, and Dias does not even specifically teach a range for the concentration of any surfactant. Although Dias provides exemplified compositions containing from 1.5% to 1.7% of surfactant, the specific surfactant that is exemplified as present in that range is the nonionic surfactant Ceteareth-25. The exemplified compositions in Dias do not contain any anionic surfactant, let alone phosphate ester surfactant. Additionally, Dias fails to contemplate the benefit provided by Applicant's developer composition. No teaching or suggestion is made in Dias to incorporate phosphate ester surfactant in a developer composition containing anionic amphiphilic polymer in order to facilitate the removal of polymeric film formed during or after the manufacture of the developer composition on the surface

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of manufacturing equipment. Therefore, it would not have been obvious to one of ordinary skill in the art to incorporate phosphate ester surfactant at Applicant's claimed range of concentration in a hair coloring composition containing anionic amphiphilic polymer to achieve Applicant's developer composition. Accordingly, a prima facie case of obviousness has not been established with respect to Applicant's present claims 17-24.

Even if a prima facte case has been established. Applicant has overcome the presumption of obviousness by a showing of unexpected results. Applicants have demonstrated unexpected results regarding the benefit of incorporating phosphate ester surfactants in developer compositions containing anionic amphiphilic polymers. Specifically, Applicant has shown that incorporating phosphate esters in the described developer compositions facilitates the removal of polymeric film formed on the surface of manufacturing equipment during or after the manufacture of the developer composition. Developer compositions are known to contain various surfactants other than phosphate esters, yet even when those various surfactants are present in a developer composition containing anionic amphiphilic polymer, an adherent polymeric film that forms on the manufacturing equipment is still relatively difficult to remove. Applicant has shown by the examples in the specification of the present Application that polymeric film formed on equipment during manufacture of developer compositions containing anionic amphiphilic polymers have a significantly lower rinse time when the composition also contains a phosphate ester surfactant as compared to the composition without a phosphate ester surfactant. See page 15, Table 2 of the specification.

Therefore, Applicant's claims 17-24 are novel and nonobvious over Dias.

## Applicant's Specification in view of US Patent No. 6.432,147 to Dias et al

Claims 1-16 are rejected under 35 USC 103(a) as being unpatentable over the state of the prior art allegedly admitted by Applicant in the Background of the Invention section of the specification of the present Application at pages 1-3 ("the Background") in view of US Patent No. 6,432,147 to Dias et al ("Dias"). The Examiner asserts that Applicant has admitted in the Background that thickened hair dye compositions comprising anionic amphiphilic polymers leave a polymeric film on stainless steel manufacturing equipment. The Examiner also asserts that Applicant admitted that the polymeric film is conventionally removed by a hot alkaline solution. The Examiner then asserts that the composition of Dias comprises the claimed ingredients and has the claimed pH. Thus, the Examiner asserts, the limitations of Applicant's method of cleaning have been met when the allegedly admitted state of the prior art in the Background is combined with the composition of Dias. Applicant respectfully traverses the present rejection based on the following comments.

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The combination of the Background together with Dias does not teach or suggest all of Applicant's claim limitations and, therefore, does not establish a prima facie case of obviousness (MPEP 2143.03). As currently amended, Applicant's claims 1 and 9 require, inter alia, that during the preparation of the aqueous composition from about 0.1% to about 15% of a phosphate ester surfactant is incorporated in the aqueous composition. As discussed above, incorporating in the aqueous composition during its preparation a phosphate ester surfactant that is present in Applicant's claimed range facilitates the removal of polymeric film formed during or after the manufacture of the aqueous composition on the surface of manufacturing equipment.

Although the Background states that hair color compositions containing anionic amphiphilic polymers tend to form an adherent polymeric film on manufacturing equipment and that hot alkaline solution has been used with some success to remove this polymeric film, neither the Background nor Dias teaches or suggests a method of cleaning a surface to which an adherent polymeric film has formed wherein the method requires a step to be performed during the preparation of the composition containing the anionic amphiphilic polymer. Rather, the Background only suggests methods of cleaning involving steps which occur after the manufacture of the composition containing the anionic amphiphilic polymer is completed and after the composition has been removed from the manufacturing equipment such as a mixing tank. Dias fails to contemplate any method of cleaning a surface to which an adherent polymeric film has formed. In contrast, Applicant's method of cleaning requires the step of incorporating phosphate ester surfactant in the composition to occur prior to the completion of the manufacture of the composition and thus prior to the removal of the composition from the manufacturing equipment.

Further, Dias does not teach or suggest a method of cleaning a surface to which an adherent polymeric film has formed wherein the method requires incorporating in the composition containing anionic amphiphilic polymer from about 0.1% to about 15% of a phosphate ester surfactant. Dias broadly discloses a number of anionic surfactants suitable for inclusion in the compositions of Dias, among which are listed anionic surfactants such as alkyl phosphate esters and ethoxylated alkyl phosphate esters. However, as discussed above, Dias provides no suggestion to incorporate in the composition phosphate ester surfactants, and Dias does not even specifically teach a range for the concentration of any surfactant. While Dias provides exemplified compositions containing from 1.5% to 1.7% of surfactant, the specific surfactant that is exemplified as present in that range is the nonionic surfactant Ceteareth-25. The exemplified compositions in Dias do not contain any anionic surfactant, let alone phosphate ester surfactant. Additionally, Dias falls to contemplate the benefit provided by Applicant's developer composition. No teaching or suggestion is made in Dias to incorporate phosphate ester surfactant in a developer composition containing anionic amphiphilic polymer in order to facilitate the removal of polymeric film formed during or after the manufacture of the developer composition on the surface of manufacturing equipment.

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Therefore, it would not have been obvious to one of ordinary skill in the art to incorporate phosphate ester surfactant at Applicant's claimed range of concentration in a composition containing anionic amphiphilic polymer, during preparation of the composition, to achieve Applicant's methods of cleaning. Accordingly, a *prima facie* case of obviousness has not been established with respect to Applicant's present claims 1-16.

Alternatively, and as discussed above, even if a prima facie case has been established, Applicant has overcome the presumption of obviousness by a showing of unexpected results. Specifically, Applicant has shown that incorporating phosphate esters in the described developer compositions facilitates the removal of polymeric film formed on the surface of manufacturing equipment during or after process manufacture of the developer composition. Applicant has shown by the examples in the specification of the present Application that polymeric film formed on equipment during manufacture of developer compositions containing anionic amphiphilic polymers have a significantly lower rinse time when the composition also contains a phosphate ester surfactant as compared to the composition without a phosphate ester surfactant. See page 15, Table 2 of the specification.

Therefore, Applicant's claims 1-16 are novel and nonobvious over the combination of the Background and Dias.

#### **CONCLUSION**

In light of the amendments and remarks presented herein, it is requested that the Examiner reconsider and withdraw the present rejections. Early and favorable action in the case is respectfully requested.

Applicant has made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, Applicant respectfully requests reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1-24.

Respectfully submitted, Stanley Pohl et al.

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